MATHILDE BENVENISTE

76 Harding Drive
South Orange, New Jersey 07079-1203
973-761-6105
benveniste@ieee.org

November 2, 2007

Mail Stop Amendments
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

RE: Application No. 10/603,263

Dear Sir or Madam:

Do Not
Enter

Ans
11/20/07

This is the response to the Office Action report dated 08/15/2007 concerning the above listed patent application. Enclosed please find the complete listing of the Claims, as amended. The amended claims differentiate more clearly the type of system to which this method applies from systems cited in the Office Action report.

The amended claims are supported by the description. I submit that the claims are novel and inventive over the prior art for the reasons given below.

The patent application teaches how to solve the "uplink channel capture" problem, which arises in wireless TDD systems using distributed contention-based access methods on multiple beams. To my knowledge, this problem has not been addressed in any of the prior art. The patents/patent applications cited in the action report employ different access methods, which don't give rise to this capture effect.

A couple of patents/patent applications were cited in the action report as having anticipated the method in the above listed patent application – referred to below as "the invention" – either separately or combined. I believe that none of the cited material anticipates the invention.

The access method in the invention is a distributed contention-based channel access method where the stations and the access point (AP) contend for the channel. Struhsaker patent application [Pub. No. US 2002/0136170 A1], which is cited throughout the action report, discloses neither a *distributed* nor a *contention-based* medium access method to transmit data. Data traffic is transmitted through the use of *TDMA*, [para. 125-137]. TDMA is a centralized and deterministic medium access method (not distributed or contention-based). Contention occurs solely in time slots designated for service requests by the stations. Since the AP specifies these time slots also, there is no contention between the AP and the stations for these time slots. A distributed contention-based access method does not require special service request channels/time slots.

Because of the distributed nature of access in the invention, it is possible for the stations to 'capture' a TDD channel, making it difficult for the AP to transmit. In contrast, in Struhsaker's method, the AP coordinates both the downlink transmissions and the transmissions of the stations. Because of this central control, a capture effect will not arise in Struhsaker's method.

The invention uses the channel differently and possibly more efficiently than the method in the cited patent applications. Stations and the AP transmit whenever the channel becomes idle and typically for as long as needed, according to the invention. In a TDMA access method like Struhsaker's, all data traffic is transmitted at time slots assigned by the AP. If a station does not have as much traffic